## **ABSTRACT**

Inflammatory state in a subject is assayed by determining the level of expression of A<sub>3</sub> adenosine receptor (A<sub>3</sub>AR) in white blood cells (WBC), e.g. circulating WBCs, from the subject. A high level of expression of A<sub>3</sub>AR is indicative of an inflammatory state in the subject. This assay can be used for determining the severity of inflammation in a subject and monitoring the efficacy of anti-inflammatory treatment. Also, the level of expression may be used for selecting patients to receive an anti-inflammatory treatment that comprises an A<sub>3</sub>AR agonist.